

Libraries in the Age of Google, Or Not...

David W. Lewis

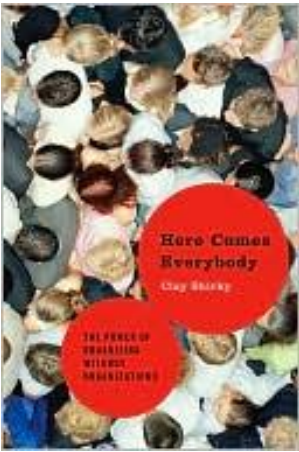
IMCPL

September 23, 2008

"You've got to be careful if you don't know where
you're going 'cause you might not get there!"

— Yogi Berra





Clay Shirky

Here Comes Everybody: The Power of Organizing
Without Organizations

Penguin Press, 2008

“New technology makes new things possible: put another way, when new technology appears, previously impossible things start occurring. If enough of those impossible things are important and happen in a bundle, quickly, the change becomes a revolution.”

“The hallmark of revolution is that the goals of the revolution cannot be contained by the institutional structure of existing society. As a result, either the revolutionaries are put down, or some of those institutions are altered, replaced, or destroyed.”

“Many institutions we rely on today will not survive this change without significant alteration, and the more an institution or industry relies on information as its core product, the greater and more complete the change will be.”

A Strategy for Libraries

- Assumptions
- Framework or Pieces of the Puzzle
- Organizational Issues
- A Final Question

Assumptions

1. Libraries are a means, not the end

Information subsidy for institutions and communities — without subsidy information not used in efficient quantities

When better subsidy mechanisms than traditional libraries comes along we should embrace them

Assumptions

GOAL: Find the strategies which provide the most value for the available subsidy

- Open access versus subscription journals
- How do we produce more scholarly monographs with the current investment of resources?

Assumptions

2. Libraries now confront a variety of disruptive technologies and these technologies will disrupt libraries

What happens when **all** of the books are digitized?

Assumptions

3. Real change requires real change

Incremental adjustments at the margins will not
be good enough

Can not drift through

Hard trade-offs will be required

This is not uncharted territory

Assumptions

4. We have a window of opportunity

People like libraries and honor what we do

We have some good will that we can spend
down

The window will not stay open forever

Assumptions

5. There won't be much new money

Increase to library budgets will be no greater than the rate of general inflation

Buying power of compensation part of the budget may remain constant

Buying power of the collections part of the budget will decline in real terms by at least 3% per year

Pieces of the Puzzle

1. Complete the migration from print to electronic collections
2. Retire legacy print collections
3. Redevelop library space
4. Reposition library and information tools, resources, and expertise
5. Migrate the focus of collections from purchasing materials to curating content

Pieces of the Puzzle

1. Complete the migration from print to electronic collections
2. Retire legacy print collections
3. Redevelop library space

We know how to do these.

Not disruptive.

Pieces of the Puzzle

4. Reposition library and information tools, resources, and expertise
5. Migrate the focus of collections from purchasing materials to curating content

We don't really know how these will work

New economic models

Will be disruptive

1. Complete the migration from print to electronic collections

- Reference Works - Indexes
 - User: transition completed
 - Library Purchasing: nearly complete
- Reference Works - Other
 - User: Not sure - probably transition nearly completed
 - Library Purchasing: Some change, accelerating

1. Complete the migration from print to electronic collections

- Journals
 - User: Transition completed
 - Library Purchasing: Some change, substitution accepted
- Books
 - User: Beginning transition
 - Library Purchasing: Some purchases, substitution not generally accepted

Envisioning the Next Chapter for Electronic Books

“Digital readers are not a replacement for a print book; they are a replacement for a stack of print books,” said Ron Hawkins, vice president for portable reader systems at Sony.”

“For its part, Google has no plans to introduce an electronic device for reading books. Its new offering will allow users to pay some portion of a book’s cover price to read its text online.”

New York Times September 6, 2007



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1. Complete the migration from print to electronic collections

- IUPUI University Library print Journal Use in 2007 — 2,400 titles – 7,800 uses (times reshelfed)
- Approximate fulltext articles downloaded from electronic resources — 1.2 million
- 48,000 E-book accesses
- 225,000 Book Circulations

1. Complete the migration from print to electronic collections

- Finish transition in purchasing for reference materials and journals - be assertive
- Plan for transition to e-books - be prepared, experiment

1. Complete the migration from print to electronic collections

- Capture efficiencies
- Save staff time in processing
- Save staff time in selection
- Save on binding, postage, cataloging fees
- Expect organizational resistance

2. Retire legacy print collections

- Print will become a less important part of the library's working collection
- Little-used print materials in prime real estate will not be acceptable over time

2. Retire legacy print collections

- Move collections to dedicated storage facilities or discard
- Preserve collections for the long term
 - 50 degrees and 30 percent relative humidity
- Enhance ILL/document delivery



2. Retire legacy print collections

- Better with a plan than doing it “on faith”
- Better if done collaboratively
- Will require new funding models

Message: We have an obligation to print legacy collections which requires institutional investment and commitment

3. Redevelop the library space

- Create a diversity of user study spaces
- Trade space for relationships
 - Center for Teaching and Learning
 - Undergraduate Research
 - Writing Center



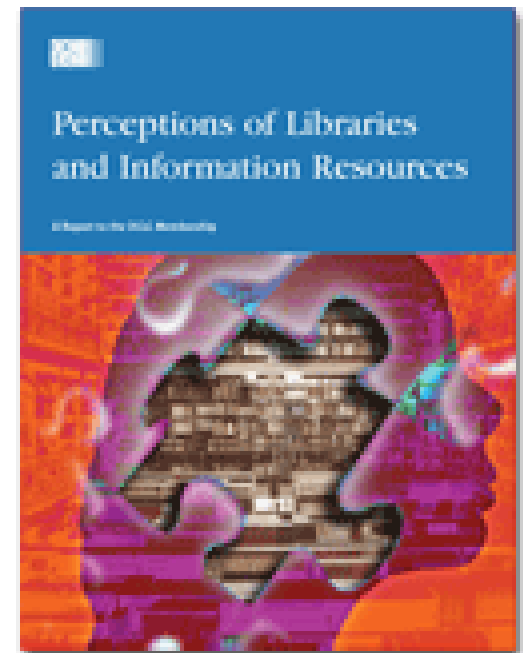
3. Redevelop the library space

- Will require additional funding
- Philanthropic opportunities
- Might become the next “keeping up with the Jones” project



4. Reposition library information tools, resources, and expertise

- Library needs to be where the users are
 - Google
 - Course management systems
 - MySpace and Facebook
- If in doubt see:
OCLC's *Perceptions of Libraries and Information Resources* (2005).



4. Reposition library information tools, resources, and expertise

“My experience with librarians, at least in scientific university libraries (I’m a scientist) is that they are basically incapable of anything beyond using the keywords in their database.”

“Wikipedia is becoming the reference desk, because it actually provides lists of relevant materials instead of dropping users in front of databases.”

— *Chronicle of Higher Education*, Wired Campus BLOG,
June 27, 2007

Britannica's New Site

More Participation and Collaboration from Experts and Readers

Encyclopaedia Britannica is about to launch a new initiative that we're very enthusiastic about. The main thrust of this initiative is to promote greater participation by both our expert contributors and readers. Both groups will be invited to play a larger role in expanding, improving, and maintaining the information we publish on the Web under the Encyclopaedia Britannica name as well as in sharing content they create with other Britannica visitors. A complete redesign, editing tools, and incentive programs will give expert contributors and users the means to take part in the further improvement of *Encyclopaedia Britannica* and in the creation and publication of their own work.

These efforts not only will improve the scope and quality of *Encyclopaedia Britannica*, but they'll also allow expert contributors and readers to supplement this content with their own. The result will be a place with broader and more relevant coverage for information seekers and a welcoming community for scholars, experts, and lay contributors.

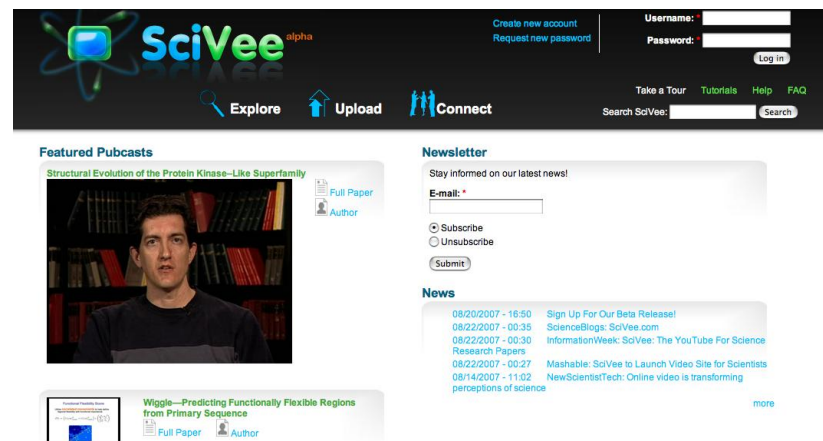
4. Reposition library information tools, resources, and expertise

“Nature Precedings is a free service from NPG that provides a way for researchers to share preliminary findings, solicit community feedback, and claim priority over discoveries. By promoting the rapid and open exchange of scientific information, the site ultimately aims to help accelerate the pace of discovery.”

— Press Release from the Nature Publishing Group, June 8, 2007

“Scientists Get a YouTube of Their Own. The National Science Foundation, the Public Library of Science, and the San Diego Supercomputing Center are hoping that their new Web site — billed as a YouTube for scientists.”

*Chronicle of Higher Education,
Wired Campus BLOG,
August 22, 2007*

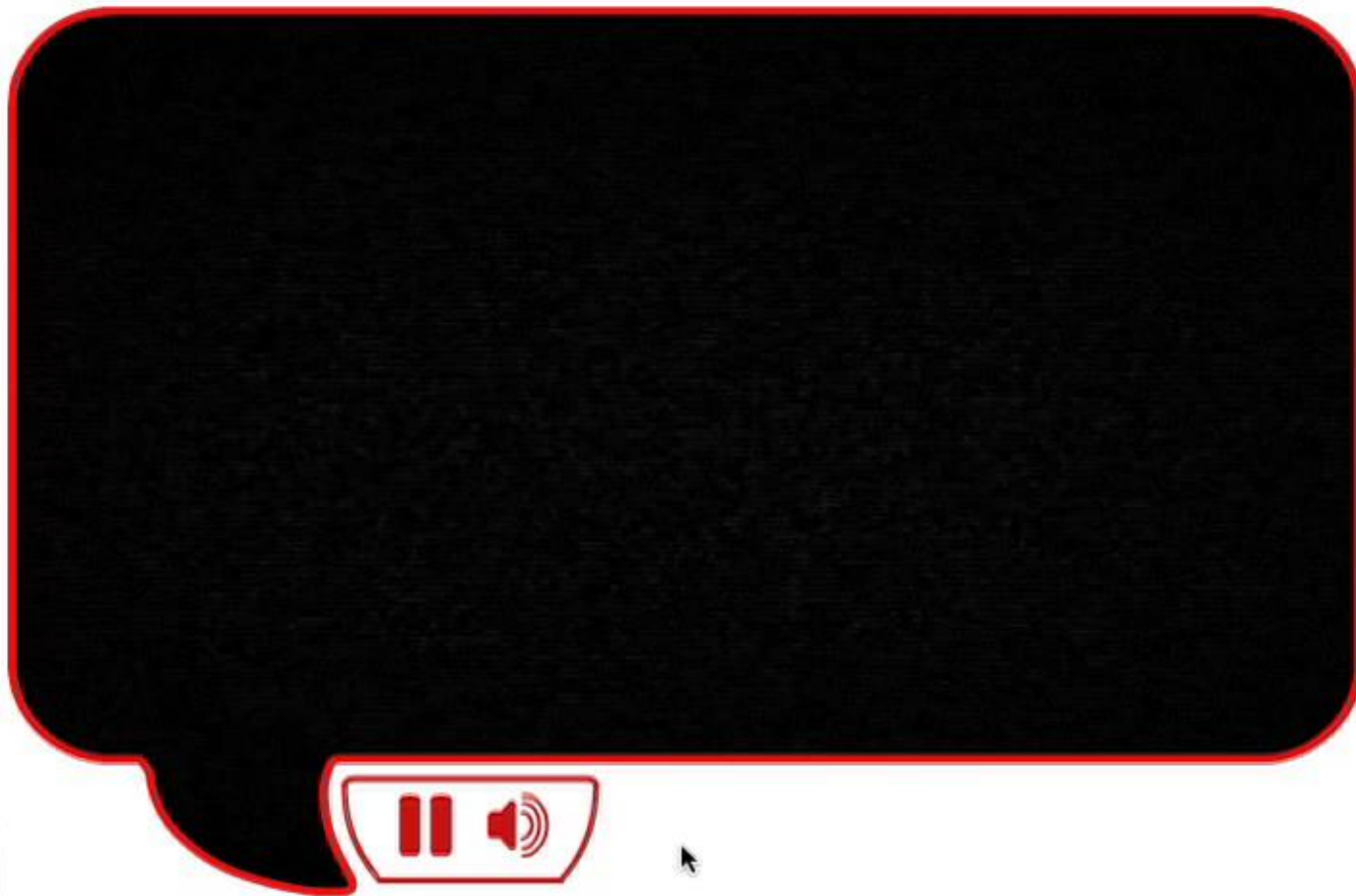


“By searching with a Guide your query is sent to a real person who is skilled at finding information on the Internet and knowledgeable on the subject at hand so that you get the few exact results you want, not the millions of results you don't.

ChaCha only provides quality, human approved results. The more you use ChaCha, the smarter and faster ChaCha becomes! Because ChaCha saves, rates, and updates all the answers that are hand-picked by our Guides.

ChaCha's intelligent Guide application learns from every search so our Guides know where to look to find information for you quickly.”





Video available at: <http://info.chacha.com/SeeHowItWorks/tabid/95/Default.aspx>

“Bit by bit, everything that can be digitized will be digitized, making intellectual property ever easier to copy and ever harder to sell for more than a nominal price. And we’ll have to find business and economic models that take this reality into account. It won’t all happen immediately.

But in the long run, we are all the Grateful Dead.”

Paul Krugman, “Bits, Bands and Books,” *New York Times*, June 6, 2008





Chris Anderson, "Free! Why \$0.00 Is the Future of Business," *Wired Magazine* 16.03 <http://www.wired.com/wired/issue/16-03/>

Better Than Free

“When copies are free, you need to sell things which can not be copied.

Well, what can't be copied?

There are a number of qualities that can't be copied. Consider "trust." Trust cannot be copied. You can't purchase it. Trust must be earned, over time. It cannot be downloaded. Or faked. Or counterfeited (at least for long). If everything else is equal, you'll always prefer to deal with someone you can trust. So trust is an intangible that has increasing value in a copy saturated world.”

Kevin Kelly, “Better Than Free,” The Technium

http://www.kk.org/thetechnium/archives/2008/01/better_than_fre.php

Eight Generatives Better Than Free

- “**Immediacy** -- Sooner or later you can find a free copy of whatever you want, but getting a copy delivered to your inbox the moment it is released -- or even better, produced -- by its creators is a generative asset.”
- “**Personalization** -- A generic version of a concert recording may be free, but if you want a copy that has been tweaked to sound perfect in your particular living room -- as if it were preformed in your room -- you may be willing to pay a lot.”
- “**Interpretation** -- As the old joke goes: software, free. The manual, \$10,000. But it's no joke. A couple of high profile companies, like Red Hat, Apache, and others make their living doing exactly that.”

Eight Generatives Better Than Free

- “**Authenticity** -- You might be able to grab a key software application for free, but even if you don't need a manual, you might like to be sure it is bug free, reliable, and warranted. You'll pay for authenticity.”
- “**Accessibility** -- Ownership often sucks. You have to keep your things tidy, up-to-date, and in the case of digital material, backed up. And in this mobile world, you have to carry it along with you. Many people, me included, will be happy to have others tend our "possessions" by subscribing to them.”
- “**Embodiment** -- At its core the digital copy is without a body. You can take a free copy of a work and throw it on a screen. But perhaps you'd like to see it in hi-res on a huge screen? Maybe in 3D? PDFs are fine, but sometimes it is delicious to have the same words printed on bright white cottony paper, bound in leather.”

Eight Generatives Better Than Free

- “Patronage** -- It is my belief that audiences WANT to pay creators. Fans like to reward artists, musicians, authors and the like with the tokens of their appreciation, because it allows them to connect. But they will only pay if it is very easy to do, a reasonable amount, and they feel certain the money will directly benefit the creators.”
- “Findability** -- Where as the previous generative qualities reside within creative digital works, findability is an asset that occurs at a higher level in the aggregate of many works. A zero price does not help direct attention to a work, and in fact may sometimes hinder it. But no matter what its price, a work has no value unless it is seen; unfound masterpieces are worthless. When there are millions of books, millions of songs, millions of films, millions of applications, millions of everything requesting our attention -- and most of it free -- being found is valuable.”

4. Reposition library information tools, resources, and expertise

- Different mix of in-person and embedded services
- Don't do the mundane
- Do what can't be done at the network level — deeper collaborations with users

4. Reposition library information tools, resources, and expertise

- Can we be successful at the institutional scale in light of network level services?
- Can we be successful with one foot in the world of proprietary content and one foot in the world of the open web?

5. Move from purchasing materials to curating content

- Open Scholarship **will** succeed
- The structure of scholarly communication **will** change
- Users will be less dependent on local library collections
- Libraries will not have to purchase as much content

5. Move from purchasing materials to curating content

- New role for libraries — curating content created in or important to the community
 - Digital
 - Contribution to the universe of open access materials
 - We will deal with users in their role as knowledge creators not only in their role as knowledge consumers

5. Move from purchasing materials to curating content

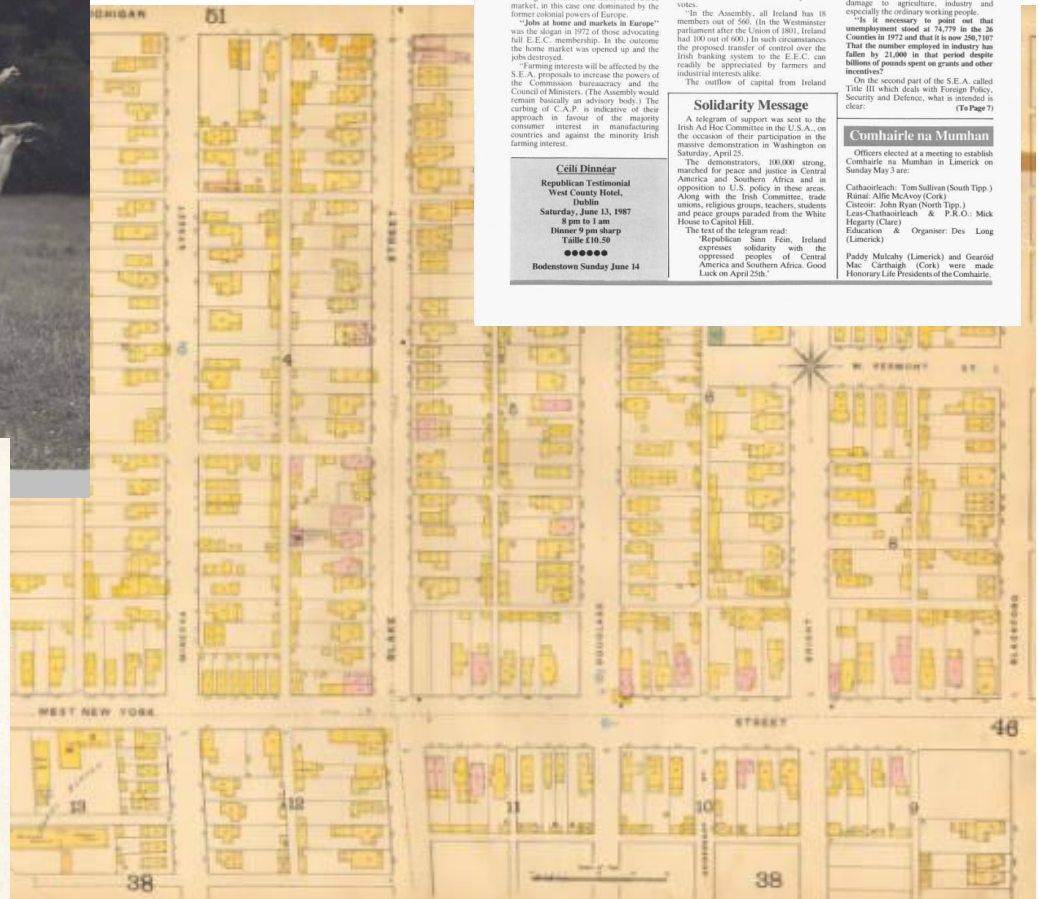


Christmas

Greetings

O Brother mine of birth Divine,
Upon this natal day of Thine
Bear with our stress of happiness
Nor count our reverence the less
Because with glee and jubilee
Our hearts go singing up to Thee.

- James Whitcomb Riley



SÓIRSE
IRISH FREEDOM

UMH. 1 BEALTUINE — MAY 1987

20p

Vote NO

This first issue of *Sóirse-Írish Freedom* incorporates Republican Bulletin-Iris na Poblachta which was published between November 1986 and April 1987.

In a speech to the delegates at the establishment of Comhairle na Mumhan in Limerick on May 3 last, Ruairí Ó Brádaigh, Uíallabair, put the Republican Sinn Féin case for a "No" vote in the upcoming 26 County referendum.

"The Single European Act further diminishes the sovereignty of the Irish people and impinges on their control of their own affairs which is necessary in order to develop the country and provide employment for its people".

This was a logical follow up, he said, to the Sinn Féin campaign against full membership of the E.E.C. in the 26 Counties in 1972 and in the Six Counties in 1975. The alternative proposed by Republicans was to urge a trade agreement with that body, or Associate Membership.

"The S.E.A. seeks to amend the original Treaty of Rome and commit to further in the E.E.C. Reason and historical experience indicate the impossibility of an underdeveloped country like Ireland thriving in the face of the full forces of a free market in this case one dominated by the former colonial powers of Europe.

"Jobs at home and markets in Europe" was the slogan in 1972 of those advocating full E.E.C. membership. In the outcome the home market was opened up and the jobs destroyed.

Farming interests will be affected by the S.E.A. proposals to increase the powers of the Commission bureaucracy and the Council of Ministers. (The Assembly would remain basically an advisory body.) The curbing of C.A.P. is indicative of their approach to favour of the majority consumer interest in manufacturing countries and against the minority Irish farming interest.

If the S.E.A. goes through, the much-vaulted "Vote", which we were told would protect small countries, will be replaced in certain cases by qualified majority voting, e.g. 54 out of 79 in the Council, out of which the 26 Counties would have only three votes.

"In the Assembly, all Ireland has 18 members out of 561. (In the Westminster parliament under the Union of 1801, Ireland had 100 out of 600. In such circumstances the proposed transfer of control over the Irish banking system to the E.E.C. can readily be appreciated by farmers and industrial interests alike.

The outflow of capital from Ireland would become a flood and force up interest rates to a disastrous level. The promises of 1972 and 1975 have not been delivered on and now a further immersion is proposed, which will undoubtedly do increased damage to agriculture, industry and especially the ordinary working people.

"Is it necessary to point out that unemployment stood at 74.7% in the 26 Counties in 1972 and that it is now 28.7%? That the number employed in industry has fallen by 22,000 in that period despite billions of pounds spent on grants and other incentives?

On the second part of the S.E.A. called Title III which deals with Foreign Policy, Security and Defence, what is intended is clear:

Solidarity Message

A telegram of support was sent to the Irish Ad Hoc Committee in the U.S.A., on the occasion of their participation in the massive demonstration in Washington on Saturday, April 25.

The demonstrators, 100,000 strong, marched for peace and justice in Central America and Southern Africa and in opposition to U.S. policy in those areas. Along with the Irish Committee, trade unions, religious groups, teachers, students and peace groups paraded from the White House to Capitol Hill.

The text of the telegram read: Republican Sinn Féin, Ireland expresses solidarity with the oppressed peoples of Central America and Southern Africa. Good Luck on April 25th.

Ceili Dinéar
Republican Testimonial
West County Hotel,
Dublin
Saturday, June 13, 1987
8 pm to 1 am
Dinner 9 pm sharp
Ticket £10.50

Bodenstown Sunday June 14

Comhairle na Mumhan

Officers elected at a meeting to establish Comhairle na Mumhan in Limerick on Sunday May 3 are:

Chairman: Tom Sullivan (South Tipp.)
President: Alfie McAvoy (Cork)
Censor: John Ryan (North Tipp.)
Liaison: Cathal Ó Riacháin & P.R.O. Mick Hegarty (Clare)
Education & Organiser: Des Long (Limerick)

Paddy Mulcahy (Limerick) and Gerard Mac Carthaigh (Cork) were made Honorary Life Presidents of the Comhairle.

5. Move from purchasing materials to curating content

The screenshot displays the IDeA (IUPUI Digital Archive) website. At the top, there is a navigation bar with the 'POLICY ARCHIVE' logo, a 'Browse By' dropdown menu, a search bar with a 'Go' button, and links for 'Login or Register Now!', 'Home', 'About Us', 'Contact', and 'Site Map'. A sidebar on the left promotes newsletter sign-ups and features a 'Sponsored by' section with logos for 'CGS' and 'IUPUI'. The main content area shows the title 'Central Indiana Growing Faster than Rest of State' with links for 'Report Misuse' and 'Download publication'. Below this, metadata is listed: 'Publication Date: 2001', 'Author: Payton, Seth', 'Publisher: IUPUI (Campus). Center for Urban Policy and the Environment', 'Topic: Population groups, population policy, and demographics (Demography and census)', 'Type: Report', and 'Coverage: Indiana'. An abstract follows, stating: 'A report of the Census 2000 population data and comparison by county with the 1980 and 1990 data'. To the right of the metadata is a 'Browse By' section with links for 'University Library', 'Ruth Lilly Medical Library', and 'IUPUI'. Below this is a 'Search IDeA' section with a search bar and a 'Go' button. Further down are links for 'Advanced Search', 'Home', 'Communities & Collections', 'Titles', 'Authors', 'Subjects', and 'By Date'. A 'Sign on to:' section includes links for 'Receive email updates', 'My IDeA' (for authorized users), 'Edit Profile', 'Help', and 'About DSpace'. On the far right, a large banner for 'IDeA IUPUI Digital Archive' features a city skyline. Below the banner, a citation instruction reads: 'Please use this identifier to cite or link to this item: http://hdl.handle.net/1805/1128'. The document details are listed: 'Title: USING AIRBORNE HYPERSPECTRAL IMAGERY TO ESTIMATE CHLOROPHYLL A AND PHYCOCYANIN IN THREE CENTRAL INDIANA MESOTROPHIC TO EUTROPHIC RESERVOIRS', 'Authors: Sengpiel, Rebecca Elizabeth', 'Advisor: Lin, Li; Tedesco, Lenore P.; Jeffrey S. (Jeffrey Scott), 1967-', 'Keywords: Remote Sensing; Phycocyanin', 'Issue Date: 8-Aug-2007', and a detailed 'Abstract' describing the study of phytoplankton pigment concentrations in Central Indiana reservoirs.

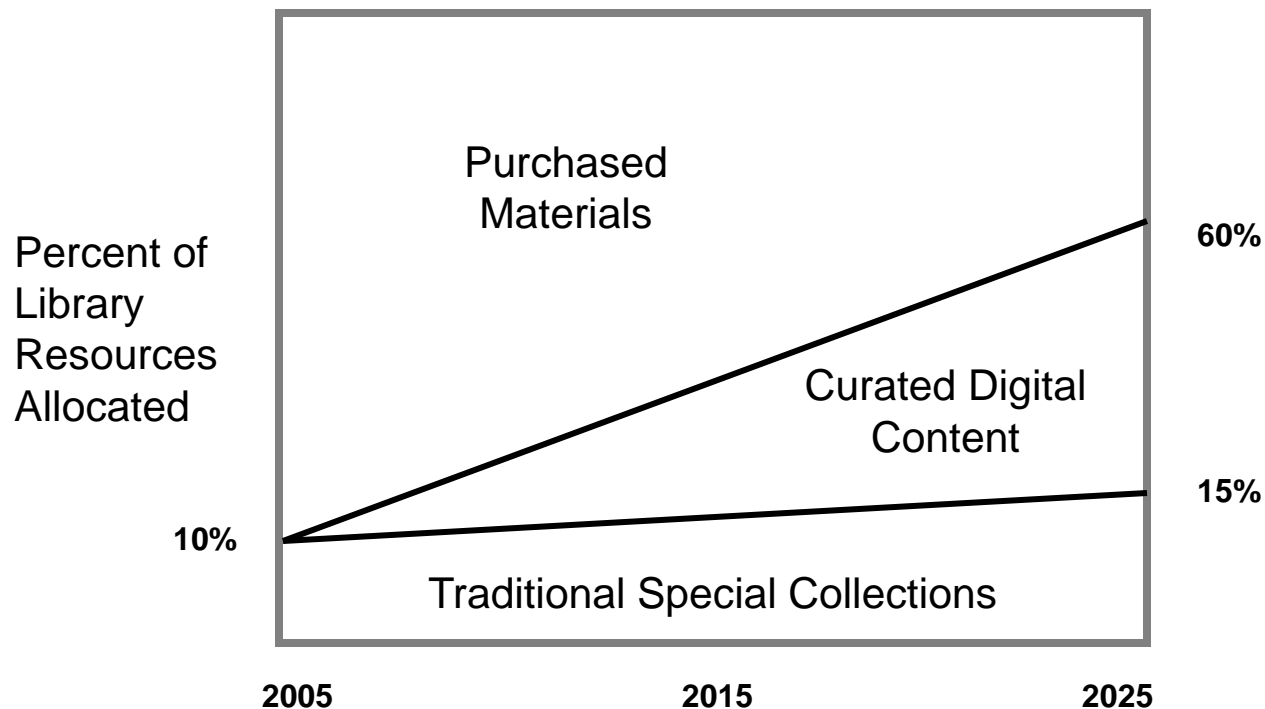
Formal launch this week with more than 12,000 documents from over 125 publishers

85 thesis and dissertations downloaded 20,000 times in nine months (June 2007 – February 2008)

5. Move from purchasing materials to curating content

- Libraries have always done two things:
 1. Purchased materials for local users
 2. Curated content for the world
- Today the split is 80/20
- In 20 years the split will be 40/60

5. Move from purchasing materials to curating content



5. Move from purchasing materials to curating content

- New staff skills and increased staffing for this activity
- Some external funding opportunities – grants
- Curation can not be done with only soft money — keeping things for the long haul requires base funding
- Keeping things for the long haul is what libraries do

5. Move from purchasing materials to curating content

- Requires discipline in repurposing resources from purchasing to curating — easy in theory, very hard in practice
- Requires a conversation to assure buy-in to the strategy
- Journal inflation will continue to squeeze us and make it difficult to justify new curation programs

“We need to begin with a fundamental fact — the cost of scholarly journals has increased at 10% per year for the last three decades.

This is over six times the rate of general inflation and over two and a half times the rate of increase of the cost of health care.

Between 1975 and 2005 the average cost of journals in chemistry and physics rose from \$76.84 to \$1,879.56. In the same period, the cost of a gallon of unleaded regular gasoline rose from 55 cents to \$1.82. If the gallon of gas had increased in price at the same rate as chemistry and physics journals over this period it would have reached \$12.43 in 2005, and would be over \$14.50 today.”

David W. Lewis, “Library Budgets, Open Access, and the Future of Scholarly Communication,” Forthcoming May issue of *C&RL News*

Organizational Issues

- Staff Composition
- Flexible Staffing and Flexible Staff
- Principles of Disruptive Innovation

Staff Composition

- In the next 15 years a 25% decline in the number of clerical/student positions. Ratio of Professional staff to clerical/student staff will go from 2:1 to about 1:1.
- Number of non-MLS positions will increase to be about 40% of professional positions. Most will have some technology component — GIS, instructional design, etc.

Staff Composition

- Number of librarians will remain about the same, but roles will change
- Librarians will do less selection and traditional reference work
- Librarians are old
- Coming wave of librarian retirements will help and hurt

Staff Composition

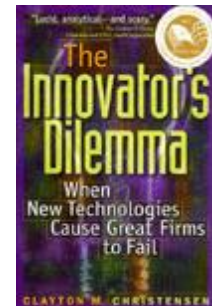
- New librarian roles will include, teaching information skills, developing and managing information support systems, and building collections of curated content
- Deeper relationships with users and community
- If librarians with appropriate skills cannot be found, non-librarians with these skill sets will be hired

Flexible Staffing and Flexible Staff

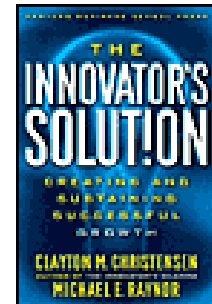
- Culture that values learning and exploration
- Strategy for hiring and retaining people with needed skills and personal characteristics
- Commitment to invest in staff and organizational development

Principles of Disruptive Innovation

Clayton M. Christensen. *Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*, 1997



Clayton M. Christensen and Michael E. Raynor, *The Innovator's Solution: Creating and Sustaining Successful Growth*, 2003



Clayton M. Christensen; Scott D. Anthony, and Erik A. Roth, *Seeing What's Next: Using the Theories of Innovation to Predict Industry Change*, 2004



Principles of Disruptive Innovation

Mantra:

Make products and services

- More reliable,
- More convenient,
- Cheaper (less time consuming to use)

Principles of Disruptive Innovation

- Exploratory project development
 - Learn by doing
 - Save resources for second and third try

Principles of Disruptive Innovation

- Be impatient for success with small projects, but don't be in a hurry to grow the project to full scale
- Encourages action and risk taking

Principles of Disruptive Innovation

- Begin with simple projects that meet the needs of undemanding users and then move up market to provide services to more demanding users
- Don't ask users what they want, rather watch what they do

Final Question:

Is your library what it owns or
what it does?

Final Question:

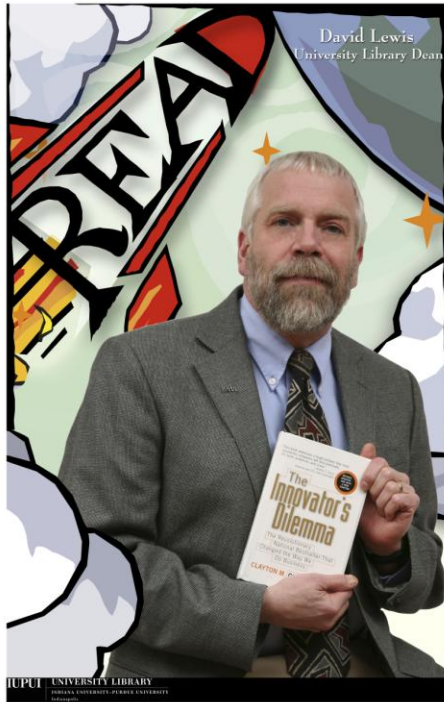
If your library is what it owns, it better own **unique stuff**.

If your library is what it does, it better be doing what is **“better than free”**.

“Always go to other people’s funerals, otherwise they won’t go to yours.”

— Yogi Berra





Comments or Questions ?

“A Strategy for Academic Libraries in the First Quarter of the 21st Century” available at:
<http://idea.iupui.edu/dspace/handle/1805/1592>

“Library Budgets, Open Access, and the Future of Scholarly Communication,” available at:
<http://idea.iupui.edu/dspace/handle/1805/1167>

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